Stormwater Management

What is Stormwater?

Stormwater is water from precipitation that flows across the ground and pavement when it rains or when snow and ice melt. The water seeps into the ground, drains to streams, or to the Town's MS4. The Town's MS4 are those drains (catch basins) that can be seen along the roadway. Because stormwater travels across the ground it can come into contact with debris, pet waste, fertilizers, chemicals, dirt and other pollutants which then drain to the streams, ponds, lakes or even sources for drinking water.

The difference between stormwater & sewage connections

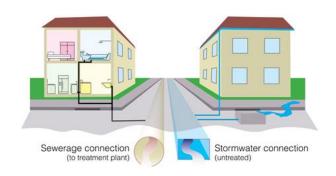


Image Source: South Australia Environmental Protection Agency

Stormwater and Development

Impervious surfaces like roads, rooftops, and sidewalks prevent stormwater from seeping into the ground, causing greater volumes of runoff. This can have a number of side effects, including increased severity of flooding and pollution into waterways.

For more information: https://nemo.uconn.edu/publications/fact_sheets/nemo_fact_sheet_3_s.pdf

Pollutants of Concern

Stormwater is not treated before entering waterways, so pollutants containing bacteria, nitrogen, and phosphorus can cause issues for the environment. These can make recreational waterways unsafe for use and contaminate sources are drinking water.

Common Sources of Pollution

Pet Waste



Image Source: https://www.flowstobay.org/node/1950

- Has bacteria that makes our streams, river and reservoirs unsafe for swimming, drinking and other recreational activities.
- Can cause streams and lakes to become murky, green, smelly, and full of algae and weeds.
- Even if placed into plastic bags can remain a hazard if not disposed of in the trash.

The Town of Canton, MA had so many bags dropped into their drains that it caused a major flood.

 $\frac{https://www.boston25 news.com/news/bags-of-dog-waste-responsible-for-clogging-3600-feet-of-storm-drain/739888193/$

When you walk your pet please bring along a plastic bag and place in the trash. In most of the town's parks and Downtown Storrs you will find pet waste disposal stations. Please contact Public Works at 860-429-3331 if you have any questions, or if one of these stations is full or out of bags.

Poorly Performing Septic Systems

- Can cause a serious health threat to your family and neighbors.
- Can introduce nitrogen, phosphorus, and bacteria into the environment, especially lakes, streams and groundwater.
- Put thousands of water supply users at risk if you live in a public water supply watershed and fail to maintain your system.

The Eastern Highlands Health District provides additional information for maintenance of Septic Systems. http://www.ehhd.org/SSDS

Fertilizers

• Contain nitrogen and phosphorous, which can increase algae growth. Algae uses up oxygen as it decays, suffocating fish.

Never fertilize before rain and keep fertilizer off of pavement where it is likely to runoff. Fertilizers should not be applied on lots next to waterbodies. Additionally, grass clippings, which can also cause algae blooms, should be kept on the lawn and can act as natural fertilizer.

Herbicides and Pesticides

• Can pose a health risk to humans, plants, and beneficial insects.

Alternatively, weed by hand and choose plants that resist pests and disease. Never apply pesticides before rain, and use them sparingly.

What the Town is doing

The Connecticut Department of Energy and Environmental Protection (CTDEEP) General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, more commonly known as the "MS4" Permit, was revised in 2016 and became effective July 1, 2017. As a result of the revision, the town will become subject to the new Permit.

Your community is implementing a Stormwater Management Plan in accordance with the CTDEEP General Permit. The goal of the MS4 permit program is **to improve overall water quality** by reducing the amount and potential for pollutants to enter our waterways.

Stormwater Management Plan

In accordance with the MS4 Permit, the town has created a <u>Stormwater Management Plan</u> that identifies measurable goals in each of the following six control measures:

- 1) Public Education and Outreach
- 2) Public Participation and Involvement
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Site Runoff Control
- 5) Post-Construction Runoff Control
- 6) Pollution Prevention/Good Housekeeping

The Stormwater Management Plan was prepared by the Town of Mansfield Engineering Division. Your participation is encouraged to assist the Town in meeting the Public Participation and Involvement Control Measure.

If you have any questions or comments regarding this plan, please contact Derek Dilaj, Asst. Town Engineer at (860) 429-3334 or via e-mail at dpw@mansfielct.org.

Illicit Discharge Ordinance

In accordance to the Stormwater Management Plan, the town created an illicit discharge ordinance in July 2019 with the goal to:

- Regulate the contribution of pollutants to the storm drainage system through stormwater discharges by any user.
- Prohibit illicit connections and discharges to the storm drainage system.
- Establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article.

The full ordinance can be viewed <u>here.</u>

Annual Reports

Beginning in 2017 the Town will develop, draft, and submit Annual Reports containing progress the town is making in meeting goals identified in the Stormwater Management Plan. The Annual Reports will be made available for Public Comment prior to submission.

Below are links to Annual Reports:

2017 Annual Report

2018 Annual Report

2019 Annual Report (draft)

Further Reading

EPA National Pollutant Discharge Elimination System (NPDES)

Preventing Runoff Pollution

http://nemo.uconn.edu/raingardens/index.htm

https://www.epa.gov/septic



Source: http://www.springfieldmontco.org/stormwater